

# Connecting Rural Health Communities in Wisconsin

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Rural Wisconsin Health Cooperative



Serving rural communities for  
*25 Years*  
1979 - 2004

The logo for the 25th anniversary of Rural Wisconsin Health Cooperative features the text "Serving rural communities for" in a small, black, sans-serif font, followed by "25 Years" in a large, elegant, cursive script, and "1979 - 2004" in a small, black, sans-serif font at the bottom.

# Presentation Overview

- RWHC Background
- RWHC IT Services
- Sampling of Membership
- AHRQ Planning Effort
- Shared Hospital Information System/EHR Initiative

# RWHC Background

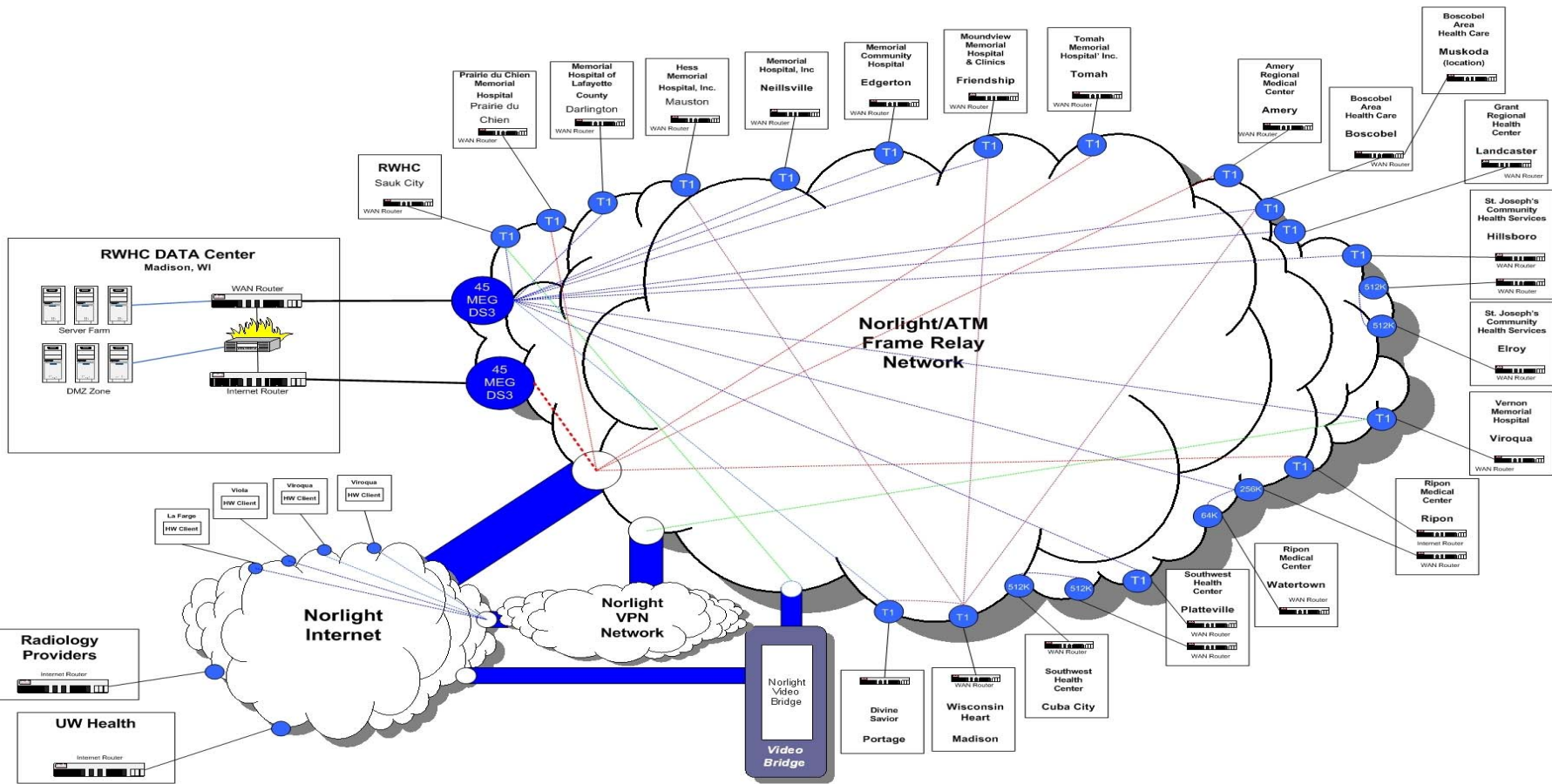
- Founded in 1979
- Owned and operated by 29 rural hospitals
- Integrated network of freestanding entities
- Goal is to meet community healthcare network needs through advocacy and high value services

# RWHC IT Services

- Secure Data Network (USF funds keep costs low)
- Internet, VPN, and E-mail Services
- Perimeter Security and Web Filtering
- Zix Encrypted E-mail for EPHI
- Unitrends Remote Backup Vault for Off-site Data Storage

# RWHC IT Services

## Rural Wisconsin Health Cooperative's Internet and Data Network



# RWHC IT Services

## Goals:

- Leverage existing infrastructure
- Apply the shared service model to health information technology and electronic health record (EHR) applications
- Help build member hospital HIT capacity

# Sampling of Membership

## Facility A (Low IT Penetration/Low Cost)

<p><b>Facility Management</b></p> <p><b>Patient Billing</b> McKesson</p> <p><b>GL &amp; AP</b> McKesson</p> <p><b>HR &amp; Payroll</b> None</p> <p><b>Time &amp; Attendance</b> None</p> <p><b>Supply Chain</b> None</p> <p><b>MPI</b> McKesson</p> <p><b>Interface Engine</b> None</p>	<p><b>HIM</b></p> <p><b>Dictation</b> Dictaphone</p> <p><b>Transcription</b> Dictaphone</p> <p><b>E-sign</b> None</p> <p><b>Document Imaging</b> None</p>	<p><b>Clinical Documentation</b></p> <p><b>Assessments</b> None</p> <p><b>Vitals/I&amp;O</b> None</p> <p><b>Patient Education</b> None</p>	<p><b>Physician Systems</b></p> <p><b>Practice Management</b> None</p> <p><b>Practice EMR</b> None</p> <p><b>Hospital CPOE</b> None</p> <p><b>Physician Portals</b> None</p>
	<p><b>Pharmacy</b></p> <p><b>E-MAR</b> None</p> <p><b>Dispensing</b> None</p> <p><b>Med Barcoding</b> None</p> <p><b>Decision Support</b> None</p>	<p><b>Radiology</b></p> <p><b>RIS</b> None</p> <p><b>PACS</b> None</p> <p><b>Tele-Radiology</b> Amicus</p>	<p><b>Departments</b></p> <p><b>Lab</b> None</p> <p><b>Surgery</b> None</p> <p><b>ER</b> None</p>



# Sampling of Membership

## Facility B (High IT Penetration/High Flexibility/High Cost)

<p><b>Facility Management</b></p> <p><b>Patient Billing</b> McKesson</p> <p><b>GL &amp; AP</b> McKesson</p> <p><b>HR &amp; Payroll</b> Lawson</p> <p><b>Time &amp; Attendance</b> Kronos</p> <p><b>Supply Chain</b> Medeclick</p> <p><b>MPI</b> Epic Identity</p> <p><b>Interface Engine</b> Cloverleaf</p>	<p><b>HIM</b></p> <p><b>Dictation</b> Dictaphone</p> <p><b>Transcription</b> Dictaphone</p> <p><b>E-sign</b> Dictaphone</p> <p><b>Document Imaging</b> Epic CDR</p>	<p><b>Clinical Documentation</b></p> <p><b>Assessments</b> Planned</p> <p><b>Vitals/I&amp;O</b> Planned</p> <p><b>Patient Education</b> Micromedex</p>	<p><b>Physician Systems</b></p> <p><b>Practice Management</b> Epic</p> <p><b>Practice EMR</b> Epic</p> <p><b>Hospital CPOE</b> Planned</p> <p><b>Physician Portals</b> Epicare</p>
	<p><b>Pharmacy</b></p> <p><b>E-MAR</b> Cerner</p> <p><b>Dispensing</b> Pyxis</p> <p><b>Med Barcoding</b> Planned</p> <p><b>Decision Support</b> Cerner &amp; Epic</p>	<p><b>Radiology</b></p> <p><b>RIS</b> Epic</p> <p><b>PACS</b> Planned</p> <p><b>Tele-Radiology</b> Amicus</p>	<p><b>Departments</b></p> <p><b>Lab</b> SCC</p> <p><b>Surgery</b> McKesson</p> <p><b>ER</b> Logicare Discharge</p>



# Sampling of Membership

## Facility C (High IT Penetration/Low Flexibility/Managed Cost)

<p><b>Facility Management</b></p> <p>Patient Billing CPSI</p> <p>GL &amp; AP CPSI</p> <p>HR &amp; Payroll CPSI</p> <p>Time &amp; Attendance CPSI</p> <p>Supply Chain CPSI</p> <p>MPI CPSI</p> <p>Interface Engine None</p>	<p><b>HIM</b></p> <p>Dictation Lanier</p> <p>Transcription CPSI</p> <p>E-sign CPSI</p> <p>Document Imaging CPSI planned</p>	<p><b>Clinical Documentation</b></p> <p>Assessments CPSI</p> <p>Vitals/I&amp;O CPSI</p> <p>Patient Education CPSI/Micromedex</p>	<p><b>Physician Systems</b></p> <p>Practice Management None</p> <p>Practice EMR None</p> <p>Hospital CPOE CPSI</p> <p>Physician Portals CPSI</p>
	<p><b>Pharmacy</b></p> <p>E-MAR CPSI</p> <p>Dispensing Pyxis</p> <p>Med Barcoding CPSI</p> <p>Decision Support CPSI</p>	<p><b>Radiology</b></p> <p>RIS CPSI</p> <p>PACS Planned</p> <p>Tele-Radiology Amicus</p>	<p><b>Departments</b></p> <p>Lab CPSI</p> <p>Surgery CPSI planned</p> <p>ER Logicare discharge</p> <p>CPSI forms planned</p>



# Sampling of Membership

Other systems used by RWHC members:

- Dairyland
- Meditech
- EMS

Systems used by large urban providers:

- Epic
- Siemens

# AHRQ Planning Effort

## Rural/Urban Collaboration

- 12 RWHC members
- 3 Madison hospital representatives
- Madison Patient Safety Collaborative

# AHRQ Planning Effort

## Initial Objectives

- Determine the “readiness” of the hospital partners to expand and enhance their EHR capacities so they can be integrated with one another
- Develop a workable model/plan for standards-based data-sharing that would allow multiple providers using disparate information systems to access patient information via a common platform
- Create a quality measurement and enhancement tool that would allow project partners to measure improvements in quality and patient care that are directly related to EHR implementation





# AHRQ Planning Effort

## Activities

- Consensus building through monthly meetings and discussions
- Detailed assessment survey to establish group readiness to implement EHR applications and data exchange
- Discussions about institutional strategic needs
- Education sessions related to EHR implementation and data exchange
- Research of existing vendor-independent data exchange efforts (Santa Barbara, Massachusetts, Taconic)
- Site visits to existing shared EHR cooperatives (INHS, SISU)
- Education of RWHC Board Members (CEOs of RWHC hospitals)

# AHRQ Planning Effort

## Early Lessons

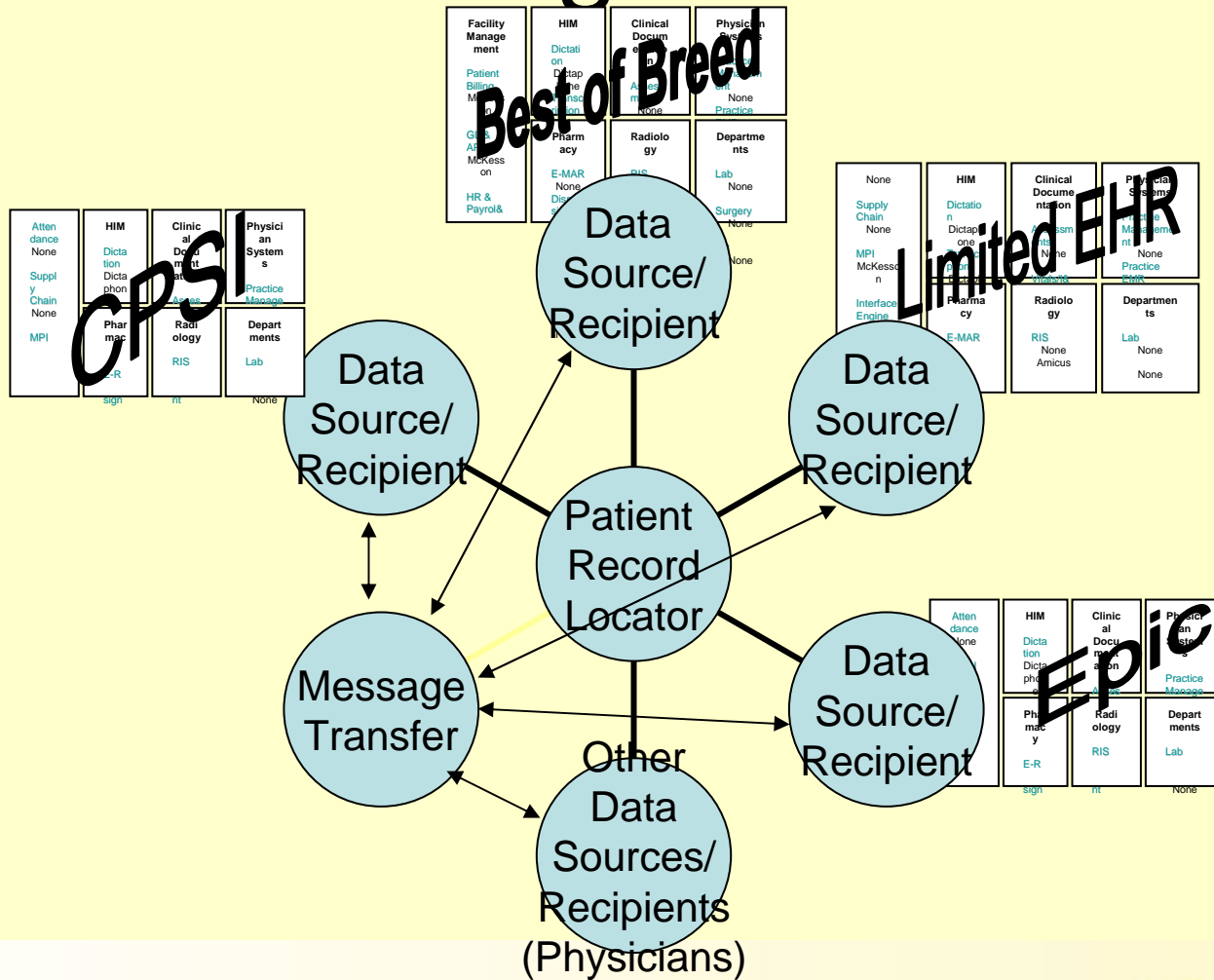
- Data exchange is expensive
  - Santa Barbara (\$10 million in seed money)
  - NHIN (\$156 billion, and \$48 billion annually to operate)
- Data exchange and interoperability are two different things
  - Waiting on data exchange standards
- Rural and urban hospitals have distinctive strategic interests
  - Urban hospitals have a strategic interest in data exchange
  - Rural hospital have a strategic interest in developing their internal EHR systems in preparation for data exchange.



# AHRQ Planning Effort

- Benefits of data exchange infrastructure accrue to larger communities
  - Santa Barbara Data Exchange: Moving Toward Electronic Health Information Exchange: Interim Report (2003) “The analysis shows that there are positive returns to health information exchange in all except small communities (e.g., one hospital and less than 100 physicians)...”
- Benefits not aligned with those who shoulder the cost
  - According to the Advisory Board NIHIT Briefing, “hospitals and providers foot 97% of the ongoing costs, yet receive just 56% of the potential benefits. The remaining benefits are dispersed among payers and other stakeholders.

# AHRQ Planning Effort



# AHRQ Planning Effort

- Markle Foundation: Achieving Electronic Connectivity in Healthcare (2004)
  - “Our recommendation is that both applications and (health information exchange) infrastructure should be developed and adopted simultaneously, in incremental steps that always bring us closer to the ultimate goal, and that deliver positive value for adopters at every stage.”
  - Positive value to ensure sustainability

## Consensus Position

- Implement collaborative EHR applications that are in the participating hospitals’ strategic interests. Make sure the implementations are consistent with an eventual data exchange infrastructure. Plan for a common framework.



# Shared EHR Initiative

**Shared hospital information system/EHR defined:** A complete hospital information system (with tightly integrated financial, ancillary, and clinical modules) that is used by more than one facility and has inter-facility data exchange functionality.



# Shared EHR Initiative

## Benefits of a Shared EHR

- Contained implementation costs with common established procedures.
- Contained capital costs with a shared data center and server model
- Contained operating costs with shared system administration, help desk, etc.
- On-going purchasing and negotiating power
- Availability of patient safety tools
- Data exchange capabilities between participating providers

# Shared EHR Initiative

## Challenges of Shared EHR

- Concern about loss of existing investments, and timing of opportunities.
- Even with cost containment benefits of shared model, top-tier EHRs will require significant commitment, both capital & operating, of organizational resources to IT.
- Integration means standardizing for the benefit of the organization. This can be threatening to departmental stakeholders, especially if they are accustomed to best of breed departmental systems.
- EHR implementation is an inherently disruptive activity, which requires steadfast leadership through an extended period of great change.

# Shared EHR Initiative

## Success Factors of a Shared EHR

- Commitment of organizational resources to IT.
- Commitment of organizational over departmental causes.
- Commitment to stay the course.
- Commitment to collaboration, since the more organizations do collaboratively, the more value is derived. (Organizations will ideally exhaust collaborative options before investing in their own HIT solution).

# Shared EHR Initiative

## What Next?

- Meet with as many organizations as possible to provide details and establish levels of interest.
- Establish taskforce comprised of tentatively interested organizations, including as many stakeholders as is practical.
- Develop a process that will take us through the establishment of taskforce decision-making procedures and vendor selection, and lead to financial numbers upon which organizations can make final decisions as to whether or not they want to participate.
- If we have enough interested participants, establish a 501c3 organization, iron out governance issues, and create a detailed implementation plan and budget

# AHRQ Planning Effort

## Revised Goals

1. *Develop consensus and support among relevant communities and stakeholders for collaboration on application sharing and health care data connectivity projects*
2. *Construct an effective organizational model with management oversight to support the development of collaborative healthcare application projects and regional health care connectivity*
3. *Identify and address any common barriers to health care cooperative applications and data information exchange*



# AHRQ Planning Effort

4. *Educate and recruit healthcare practitioners from the community to participate in collaborative applications and data exchange*
5. *Build baseline capacity toward achievable information exchange among member institutions and stakeholders*
6. *On a stepwise basis, implement cooperative applications and data sharing initiatives among participating organizations and individuals*

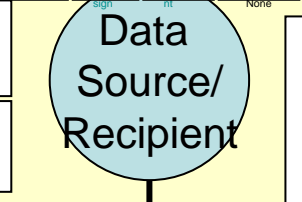


# AHRQ Planning Effort

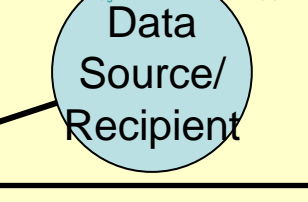
7. *Demonstrate the benefits of collaborative application development and electronic connectivity through improvements in: the quality of patient care and service; provider-patient relationships, continuity of care, patient safety, improved delivery system efficiency*
8. *Communicate to key stakeholders and external constituents project status, barriers and accomplishments*
9. *As the need for health information exchange warrants, and after standards and other enabling mechanisms have been developed and tested, join with other organizations and consortia to participate in the establishment of a RHIO*



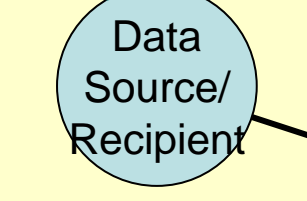
Attendance None	HIM Dictation Dictaphone	Clinical Documentation Systems	Physician Systems Practice Management
Supply Chain None	Pharmacy E-R	Radiology RIS	Departments Lab



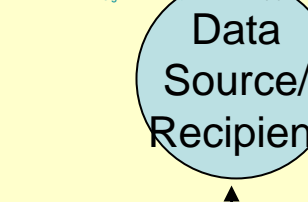
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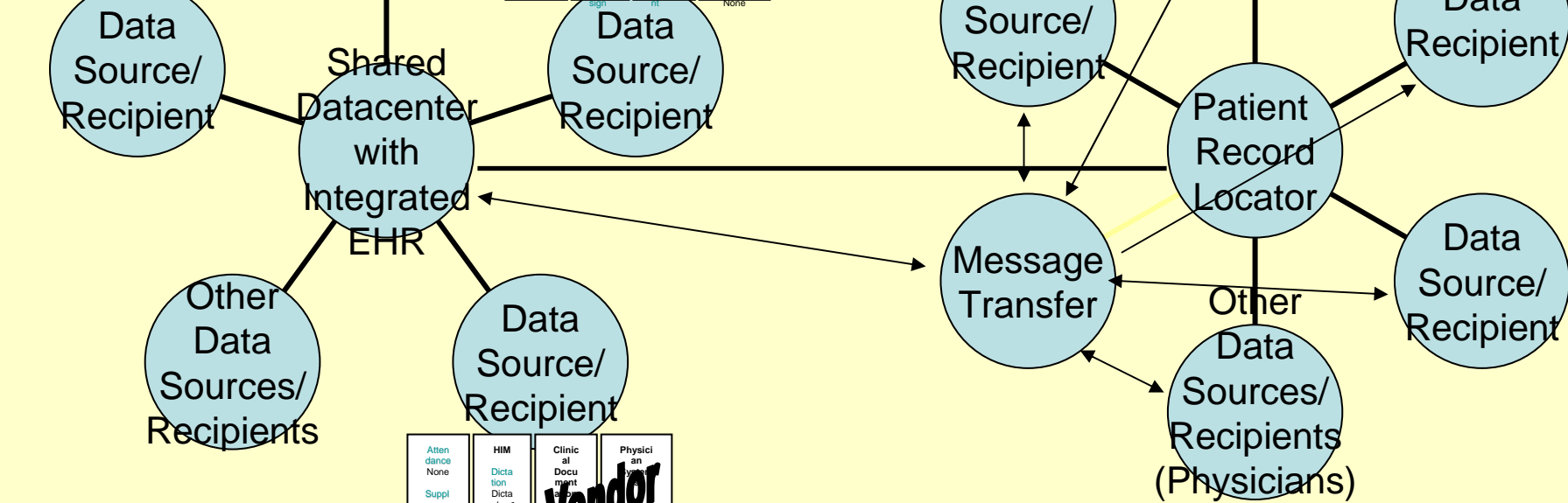
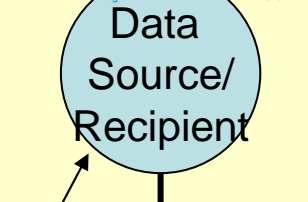
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